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AUTHOR Tough, Allen
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ABSTRACT

A common pattern in all studies of adult learning is that informal learning seems to be a very normal, very natural human activity. A 30-year old study and the 1998 Livingstone study show parallel findings. One of the most important findings is that about 90 percent of people had done some sort of intentional learning in the last year. The 10 percent who had not are content with their situation. Other findings are that people are learning a whole range of things; about 20 percent of all major learning efforts are institutionally organized, while the other 80 percent are informal; and informal learning is a very social phenomenon. In the 1977 Penland survey, the four top reasons for preferring to learn on one's own are a desire to set one's own learning pace, to use one's own learning style, to keep the learning strategy flexible and easy to change, and to put one's own structure on the learning project. The three reasons cited least are dislike of a formal classroom situation with a teacher, lack of money, and transportation. Kinds of learning related to work that people do are learning to do a task, learning new ways of doing things, and sharing among co-workers. People frequently engage in learning to improve their performance of a task. Implications or next steps are: studying the need to over-control; assisting people to successfully learn about social and global issues; using the World Wide Web in adult education; and encouraging people to look at their own learning. (YLB)

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"Reflections on the Study of Adult Learning"

by Allen Tough,
OISE/UT

A brief talk at the 3rd New Approaches to Lifelong Learning (NALL) Conference – Ontario Institute for Studies in Education of the University of Toronto, Toronto, Canada

February 19, 1999

The Ontario Institute for Studies in Education (OISE) had just opened in 1965, so my research in adult informal learning took place in the first five years of OISE's life, and several students had some interesting data on adult learning. The first three chapters of my book (The Adult's Learning Projects, 1971) went all right, but then I began to think 'no one's going to take me seriously, no one's going to take this book seriously at all unless we get out and document that informal learning or self-directed learning is very common.' We were looking at what people learn and how and why, but we weren't looking at how many people do this and how much time do they spend at it, just the kinds of things that the NALL survey has just found.

So I stopped writing the book after chapter three, so we had people going out and interviewing different groups so that we could begin to document that, yes, this is a common phenomenon. Lots of people do, they spend lots of time in informal learning projects and so on. OISE was very wealthy in those days, so we had a research associate and a research assistant and lots of students who were paid to do your research for you.

I was surprised when I looked back at that, we only did sixty-six interviews and we sort of based the next few years on these sixty-six interviews. But, as I used to say at the time, I think you know more after ten interviews than if you don't do any interviews at all, so it's worth doing even small studies, if they illuminate things. Of course, they can lead on to further studies, and that's what happened in this case.

There have been something like fifty-five replications since. What happened was that people in other parts of the world said that maybe that's the way people learn in Toronto and Hamilton, but we don't do that down in Atlanta or we don't do that in Ohio, and then it was over in France and Holland and then it was Jamaica and Zaire and so on. Then people started saying, 'well, maybe it's a middle-class phenomenon and we're going to study informal learning among unemployed people in Montreal,' and a New Jersey study did unemployed people.

For me, one of the fascinating things was it doesn't seem to matter where you are or what group you study, you get a very similar picture of informal adult learning, and that for me has actually been the highlight of all this research, as I read all these different studies, is that there seems to be a common pattern, that informal learning just seems to be a very normal, very natural human activity, and that's why I think we're all dealing with the dichotomy between that fact and the fact that is so invisible, that people just don't seem to be aware of their own learning. They're not aware of other people's learning,

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educators don't take it into account and so on. So there's this normal, natural thing going on, people are spending 15 hours a week at it or on an average, and yet it's not talked about, it's not recognized, it's sort of ignored or invisible. It seems to happen in all demographic groups.

The only study that I have ever seen that didn't find a whole lot of informal learning was done in an old folks' home in Syracuse by a Cornell M.A. student, and she found very little learning, but I checked with her and she said that, in particular, that old folks' home was a very repressive kind of atmosphere. There was just absolutely no stimulation to learn. But every other demographic group seems to have lots of this going on, so it's not as though it's a kind of learning going on in this country or this group. It seems to be just pretty well worldwide. And one of those studies was done by Alan Thomas and two of his colleagues on the two coasts of Canada, so there has been an earlier Canadian survey and I found that a very interesting survey. It's one of the many studies that have found very similar patterns.

And I'm very excited about the survey that's just been completed by NALL (see Livingstone, 1998) because it's up-to-date, so it's documenting that not only does this happen across the world, but it seems to happen across the decades. We now have thirty years of studies that suggest that this [informal learning] is not going to go away. In fact, it seems to be increasing. And I just wanted to take the next few minutes to reflect on some of the parallel findings of what we found thirty years ago with sixty-six people, a huge sample, and what David Livingstone and his colleagues have found with this national survey.

For me, one of the basic, one of the most important findings is the number of people who have done some sort of intentional learning in the last year. It's somewhere around 90%. Your [NALL] figures today were suggesting it's even higher because you only had about 3 ½ % in that lowest category (see: www.oise.utoronto.ca/depts/ sese/csew/nall/sur_res.htm) And I think that's a whole shift for educators to make because you often hear adult educators wringing their hands and saying, "oh, how can we motivate people to learn, I can't get people to learn." And I say, nonsense, people are already learning, they're already doing it, what do you mean you can't motivate people. Maybe you can't motivate them to learn what you want them to learn, but they're motivated to learn. They're already doing it. You don't have to stimulate people to learn, and yet a lot of adult educators perceive adults as not normally learning. It's not a normal thing for them, you have to somehow motivate them or force them or persuade them to do this thing. Well, they're already doing it, they just may not be doing it the way the educator wants them to do it.

I think that's a very important finding. I was also fascinated by the 10% who had not learned anything intentionally in the last year. And so I asked the interviewers, these were mostly doctoral students, to tell me about those individuals and I listened to them and then we did some later studies on intentional change and again, I did the same thing. Tell me about the people who haven't changed anything in their life or themselves in the last year. [To the audience] I would be interested in your guesses, let's just take a couple of minutes for your guesses, what are your guesses about this group, this 10% or 5% who haven't learned anything in the last year. Any guesses at all about any of their characteristics? Deceased? Politicians? Any other guesses? This is intentional learning. I believe they learn stuff incidentally, but not intentionally, not on purpose. No other guesses? Okay. My guess is that they really had intentionally learned anything. It wasn't just a misperception because these were doctoral students who really knew the phenomenon and would probe in the interviews. Okay, maybe they were overloaded with formal education. Actually, we didn't find any of these things. We interviewed politicians and we actually interviewed college students at one point and found they were doing lots of informal learning. Actually, we had a very gung ho research assistant at that time and we interviewed the mayor of Hamilton and the mayor of Toronto, and found that they were doing lots of learning, intentional learning.

No, what we found was that these people are quite content. That seemed to be the keyword, content. That

their life was sort of together, they'd done lots of learning before. They learned how to raise their kids or do their job or whatever, but now they're just sort of on a plateau, but life is good, it's content, it's not that they're under extraordinary stress. They don't seem any busier than the rest of us, but just right now they just don't see any need to learn and I just find that fascinating and again it changed my stereotype, my perception, because as an educator I want to get everybody to learn, you know, and I was worried about this 10% who weren't learning. But it turns out maybe we don't need to worry, maybe they're doing fine too, just right now they don't need to learn anything. So that for me was a good learning from all of this.

Another finding that seems to be right across the three decades is the range of things that people are learning and it's not just one thing. The 15 hours a week estimate isn't aimed at learning only one thing. It's not just how to be a better ... whatever their job is, it's not just raising their kids. It's the whole range of things and often with groups like this, if I have time, I ask people to jot down their own learning efforts in the last year and then share their lists with the group. It's a very empowering exercise. And what fascinates me is each of those lists has enormous diversity, that many of the lists have something physical on them, exercise or a new sport or something like that – or a health thing. Many of them have something around money, running their finances, RRSPs, whatever. Of course, lots of work-related things are claimed for most occupations. Usually something about raising kids or relationship with spouse or something like that. So you get this range for each person in one year, and again, I think we as educators often don't think about the enormous range of what it is that people are learning, any one person, but it's quite extraordinary.

Another finding was that we were looking at all learning efforts, including 'professionally planned' or 'academic or institutional' or whatever you want to call them; formal. We found a 20/80% split. We found about 20 percent of all major learning efforts were institutionally organized, or it was like a driving school instructor or piano instructor, something like that. It was one-to-one, but it was still somebody you paid to teach you, so it was a professional formal situation. And the other 80% was informal. We didn't know what to call it. So we called it 'professional plan' and 'amateur plan', amateur being a positive word, not a put-down. That's when I came up with this idea of the iceberg as a metaphor, because so much of it is invisible, because we were surprised to find so much adult learning is sort of under the surface of the ocean as it were. You just don't see it. You could forget it's there unless you keep reminding yourself that it's there.

Incidentally, we interviewed 16-year-olds and got very similar results. We interviewed 10-year-olds and did not get similar results, so maybe between the age of 10 and 16 something happens, maybe people become more longer term in their goals and start learning stuff now because it'll pay off later. I don't know. Unfortunately, we didn't have the resources to pursue that. But, what we're talking about, I think, applies at least to 16-year-olds and certainly to college students as well.

When we looked at the informal part below the surface of the ocean, we distinguished three kinds of 'planners'. 73% of all adult learning is planned by the learner himself or herself. The learner decides what to learn, how to learn it from one episode to the next as they go along over the weeks. So that 73% – so most of the 80% in other words – is there. That leaves 7%. You know, 80% was informal, of that 80%, 73% is the learner himself or herself. 3% was with a friend, a relative, a next-door neighbour or a co-worker teaching you something.

So if you want to learn to drive a car or play the piano, you can ask your neighbour to teach you, you don't have to hire a professional, you can get a family member to teach you. So that was only about 3% of all adult learning and then 4% was a peer group, a group of peers who get together and learn something. Incidentally, Alan Thomas is probably aware of this and Jack Quarter, there's some fascinating early literature in adult education in Canada on groups of people getting together to learn

things on their own without using any kind of professional assistant whatsoever. One of the early ones is people preparing for a boiler maintenance licence, you know, for people who operate boilers have to be very skillful and have a licence and groups of these engineers got together to prepare for this exam. So that was about 4%. So we have the fact that the learner is a typical planner, but then you have some where it's a friend or a co-worker or a neighbour and some where it's a group learning together.

Now one of the other things that we noticed – and I haven't really heard David [Livingstone] or Alan [Thomas] talk about it this morning – it's a very social phenomenon. Informal learning is a very social phenomenon. There's a lot of human interaction, and this is one of my big struggles with my major professor at the University of Chicago when I started studying this kind of thing, because he was the kind of guy who at that time, when he was learning Spanish because he was going Mexico, I think he was the kind of guy who would get the language tapes and take them up to his room at home and just, you know, listen to these tapes and never interact with anybody! So he thought it was totally stupid for me for my Ph.D. thesis to study the human interaction of people who were learning in an informal way because obviously in a classroom or a room like this, you have lots of interaction, right, but when you learn on your own you don't. Well, it turns out that's not true, you do. In fact, what I found was that you interact with an average of ten or eleven people while you're learning one thing, just over the course of weeks while learning that one thing. That's a lot of interaction. In fact, there may actually be more social interaction in informal learning than there is in classroom learning, which again shatters one of our stereotypes, you know, you go to school to be social and if you're learning at home you're not social. In fact, my wife Cathy and I have struggles about this whether if I'm on a computer and, you know, interacting with 20 of my colleagues around the world by email, is that social or not? She thinks I'm just being totally unsocial. I say, no, I'm interacting with 20 people.

In a very large survey, people all across the United States were asked which two reasons were most important for preferring to learn on their own, instead of in a class or course. They were handed a card with the following items printed on it.

Can you guess which 4 items were chosen by a large number of persons? And which 3 items were chosen by only a few persons?

[To the audience:] You have a handout sheet or should have a handout sheet [see Fig.1]. If you don't, Cathy will bring one around to you, which comes from the survey by Penland in the United States.

a. Transportation to a class is too hard or expensive.
b. I don't have enough money for a course or class.
c. I don't like a formal classroom situation with a teacher.
d. Lack of time to engage in a group learning program.
e. I wanted to learn this right away and couldn't wait until a class might start.
f. I didn't know of any class that taught what I wanted to know.
g. Desire to put my own structure on the learning project.
h. I wanted to keep the learning strategy flexible and easy to change.
i. Desire to use my own style of learning.
j. Desire to set my own learning pace.

Allen Tough's Handout Sheet - This survey is reported in Patrick R. Penland, Self-planned learning in America. Pittsburgh: University of Pittsburgh, 1977.

Penland was a library school professor who wrote about librarians as sort of learning consultants and he got very intrigued in our early work and so he did a survey in the States. He got money for a survey research organization and did a pretty good study. He wasn't statistically oriented, so I'm not sure it's

statistically totally perfect, but he put this on the map and he had 1,501 participants on the survey. I don't know, was NALL's was, exactly 1,500?

David Livingstone: 1,506 [people were surveyed for the NALL study].

Allen Tough: So you beat that [Penland], okay. It really is the world's largest so far.
And Penland's was all across the states. It was good sampling and one of the questions was "why do you prefer to learn on your own instead of a class or course?" and they were handed a card with these items printed on the card. This was door-to-door survey and obviously not a telephone survey. From the card people selected which items reflected their reasons for informal learning, rather than going to a class or course.

What I want you to do today is to guess, just take a few minutes to mark up your [handout] sheet, and guess which you think are the four items that most people [in Penland's survey] chose, the most common four, and which do you think are the least common. Just put a checkmark beside the four you think were most common or an x beside the fewest or whatever. Isn't this fun, to have real data?

Okay, let's just look at the first two. It's "transportation to class is too hard or expensive," how many picked that as one of the most common ones? Maybe half of you. And the next one, "I don't have enough money for a course or a class." Okay. These were actually the two least, which totally breaks the stereotype.

Everybody says people don't take classes because they don't have money or they can't get there, but that's not what people themselves said. Now you know, maybe they're fooling themselves but you have to take data pretty seriously I think, and that's what people said. In fact, this whole list is reverse rank order so that the four at the bottom of the sheet are the four most common, (j) being the most common of all and it's reverse rank order. In the United States at that time that he did this, there was enormous emphasis on those first two issues: money and transportation, and there was an effort to put literacy classes and so on out into apartment buildings and malls and all that kind of thing. American adult educators just ignored these findings because they totally went against their ideology.

Now I bring this sheet not just for the fun of it, although it is a fun exercise, but also because I think there is something really deep underneath it, and this is when you look at those four that got the most people saying, "yeah, that's why I didn't take a course or a class," those four at the bottom of your sheet (j) (i) (h) and (g), they seem to have something in common. People seem to want to be in control. They want to set their own pace, use their own style of learning, they want to keep it flexible. In other words, they perceive courses and classes as inflexible. They want to put their own structure on it.

I think this is really fascinating. Those are things that as educators we don't pay any attention to, you know, we don't think of learners as even noticing those things or caring about those things at all. What adult educators so often put their efforts into is the transportation and the money. How can we make courses more accessible by making them cheaper, or putting them into apartment building lobbies or shopping malls, you know, places that people can get to. Well, it turns out that's not what people are saying at all. They're basically saying, "you know, I could get there, I could find the money, but it's just I don't like the way you learn in courses and classes, it's not my way of learning, I want to do it my way." So I think there's something really deep and significant in this that we should all be paying attention to so that's why I bring it to you today.

Just one other thing and then I'd like to get some of the questions and reactions and then take some time to look at the implications of all of this, some suggestions I have for it, but the one other thing I want to mention is the types of work-related learning that we've found.

What kinds of learning do people do related to work? I think the most common – we don't have data comparing which is most common – but my guess is that the most common kind of learning is related to the fact that the person has a task to perform and they learn in order to do that particular task. For example, they have to have a report on the boss's desk next Monday, they have to operate a new machine, or they're a union steward and there's a new issue coming along that they have to learn about. It might be something immediate, that has to be done in the next few days, they're going to have to perform something, so they learn in order to perform that task. What we actually found in the research is people often learn in order to perform a task better, but they could do it. They could do the job, the task, whatever it is without learning. They could just go in and do it, but they don't want to just do it, they want to do it better so they learn in order to write a good report, in order to learn to run the machine properly and safely, in order to handle the union issue in an effective manner or whatever. So it's very interesting to me that it's not that people learn because they can't do it without learning, they learn in order to do a good job. That's that most common reason. We find it not just in work-related issues, but in raising kids, renovating your basement, all kinds of things. People want to do something and they learn what they have to learn in order to get that task done. That's one of the reasons it's invisible I think. It's one of the reasons this iceberg metaphor works is that people think "I wired my basement," "I dealt with the union issue," "I wrote the report for my boss." They don't think about "I did some learning in order to do that task," they just think of the task. You know, "I raised my kids," they don't think about what I learned in order to be a better parent.

Another kind of job-related learning is where new things come along that have to be learned, new ways of doing things, but this is a more general thing. Trends in a field – and this is of course in studies of managers learning – this is what they don't find time for, because there's always fires to put out. They're always learning what they have to learn in order to do that task next Monday, so they don't learn about trends in their particular business or field and they don't find that much time to learn about these other things, but that's another kind of learning. It's generally learning to keep up with a field, to keep up with changes in a field, new processes, new ideas, new ways of doing things and so on. Some of the journal reading they do is due to that (learning to keep up in their field) or learning things from their organization, if they are a member of a professional organization or some other organization that's related to their field. They'll read the materials in that organization and go to workshops because that's more a general kind of keeping up, but the main kind of the learning seems to be because there's a particular task staring them in the face and they have to do it within a few days or a couple of weeks and so they learn in order to do the immediate task.

The other thing that happens is a lot of sharing among co-workers and that's hardly ever been studied. There was one small study of people of people in a meat-packing plant who were standing on the [assembly] line and I guess, you know, "I carve the whatever part of the cow, and then the next person carves part," and so on. What they found is that when the person beside me is away, that I am able to go and step into her job, because I've been watching out of the corner of my eye for the last few weeks. This doesn't even fit our definition of learning because it's not a very intentional sort of learning, but it's just part of normal human curiosity to 'sort of notice what the person beside us is doing' and this is how we learn how to do things.

There may be a lot of learning from other people at work that's just sort of part of being together and talking at coffee break and so on, maybe a little less intentional that our definition, but still very important. A faculty member here at OISE called Harold Houston was studying this, but unfortunately didn't manage to complete the studies.

Now, I do have some implications that I want to mention, but let me stop for a few minutes first, because that's all I want to say about the phenomenon of learning and I wonder if you have any questions on what

I said so far, anybody want to argue with me, comments, reactions?

Question: Have you or anyone else tried to correlate the percentages of methods of informal learning that you talked about, with reference to learning styles?

Allen Tough: I'm not a learning styles fan myself. I like David Cope but, in fact, he's not as enthusiastic about his own view of learning styles as other people are at this point. My sense is that all of us use all the styles and maybe we feel more comfortable with one or we sort of start off with one, but what strikes me about adult learning is the range of styles that one person will use over a year or over several years, so I haven't done that research and whether it would be useful I don't know.

The one tendency toward learning style that I've found is if you ask people if you wanted to learn so-and-so, how would you do it, a lot of people say "I'd go and get the best book or journal," or "I'd go on the Worldwide Web." It's print-based. A lot of people say "I'd go and find the expert," so there is that kind of natural tendency to head for print or naturally head for an expert, and both ways have their pluses and minuses, I think. I don't mean to put down learning styles, but it's just that I think it's overdone.

Q: The 73% of learning activities that were planned by the learner, were they done individually or collectively? I mean, it was planned by the learner but then did they engage with other people?

Allen Tough: As I say, what I found in my own thesis was that they engaged with other people around the planning. They went and asked for help and advice from a lot of different people. As for the actual learning, even in a classroom, people are not interacting with other people most of the time, but they're listening, they're reading, they're thinking, they're writing, which are individual activities. Whether you're surrounded by another or not is sort of irrelevant in a sense.

Q: I mean I can quite see somebody who w? .s to learn how to cook something, they would do it on their own mostly but, you know, in the workplac so much learning takes place on the job, you know, how to do the job and people seem to learn from people or most of the time anyway and that's what Jack and I found in the research at the Big Carrot which is a workers' cooperative in Toronto.

Allen Tough: My own guess is that this is an extraordinarily important part of the learning in the workplace. My guess is that if we went in and interviewed those workers, we'd find another amount of learning, maybe double the size of what you just talked about, that is done more on their own so, you know, what you're seeing maybe the tip of the iceberg, the more visible part of learning. Maybe there is another huge part that goes on more on their own, but it may depend on the workplace and it may depend on the complexity of the tasks that have to be learned.

Q: A question about collective vs. individual learning.

Allen Tough: Yeah, it's a very vibrant phenomenon. In fact, one of the very first studies here at OISE in the 1960s was a student who studied groups of women who got together in each other's homes and learned various things and that was I think one of the world's first studies on this very vibrant phenomenon which is still thriving, but I'm saying that the other kinds of learning on which you don't basically rely on a group are probably even larger but we just haven't noticed them yet.

Q: A question on job-related learning.

Allen Tough: Well, it would be in interesting sort of study to do, go into a workplace and do surveys on how are they learning job-related things but I think you are going to find that the groups of peers is a very important phenomenon. I'm saying I think you're also going to find there's a whole lot that people learn

that's more individual. Again with a lot of interaction – and I'm glad you pointed out that a lot of interaction now is electronic because it doesn't have to be face-to-face anymore.

Q: A question about the definition of an informal learning project vs. more fragmented informal learning.

Allen Tough: You're talking about the definition of learning. Yeah. I think we have a very similar phenomenon to what David Livingstone and his group ended up with, but we actually started quite differently. We started with 'learning episodes' and for us a learning episode was any period of time in which your primary motivation is to gain and retain certain knowledge and skill. So we actually had people think about a series of learning episodes, maybe an hour today, a couple of hours next Monday, an hour a week after and so on, and we said that these episodes on learning one kind of particular knowledge and skill had to add up to at least seven hours. Now, if I were doing it again, I would say twenty hours because most of them were far more than seven, but ours was seven hours.

So we had a very careful definition actually and it took a whole chapter and a whole appendix in The Adult's Learning Projects to spell it out. In the actual interviews, you can't have people read a chapter and an appendix to get your definition, so you have to have a certain amount of negotiation, which was true in this survey as well. And I think it was a good interview schedule. But what I found is that doctoral students, because they had the conceptual framework in their head, were better at getting 'learning projects' than the surveys where we paid a research organization to do it, because they were good at surveying, they were using people who had done lots of door-to-door surveys or telephone surveys before but they didn't understand the phenomenon well enough to really probe and get people to recall it. So doctoral students were typically getting more about, you know, the researcher's biases and skills are going to affect what you get. So that I think we had a crystal clear definition, but then you have to also have people who can implement in an interview, but I think our boundaries were pretty clear actually.

I went to West Africa to Ghana to work with a doctoral student there who was collecting data and we both interviewed teachers and people who worked in a bank and people who worked in a department store head office, and it was interesting that we got very different results. The hours we got were the same but he got far more learning projects than I did, far more learning efforts. When we looked at that we realized he had already worked in that culture for two years before he came back here to work on his Ph.D. and I was brand new to the culture, you know, I'd been there a week. And so he was much more skillful that I was at getting people to separate out different learning projects. I was so unskillful, I just sort of had them lump this whole thing together, you know, I learned a new management style or I learned a new teaching method or I learned how to work better with the kids or whatever. I wasn't skillful enough to get them to make a distinction. So we were getting the same number of hours in total, but he was getting more learning efforts that I was.

It was an interesting demonstration for me of how the skill of the interviewer can make a difference to what you get, which can happen with the definition as well, that interviewers who really understand the definition seem able to get more learning than those who don't.

We also had people keep diaries. A couple of people say, "well, how do you know that people are telling you the truth?" So we had some people keep learning diaries. Every evening they would write down 'what did I spend time in trying to learn today'. We found that the number of learning efforts and the number of hours were higher in the diaries than they were in the interviews. That confirmed that the interviews were probably getting fairly good data.

Maybe we should move on to the implications at this point and then you can come back with other questions and comments and reactions. I just have five I call them next steps, five places I hope we go next and as David Livingstone mentioned, the project is at a pivotal point and so it's a good time to think

about where do we go next.

For me, one of the fascinating questions is over-control and we ourselves as educators, as parents, as supervisors. It seems fairly well documented that in fact we over-control, we have this tendency to over-control. We want our kids to grow up to be flexible, healthy, creative citizens, and how to we achieve that? Well, we micro-manage them, we make sure that every single minute they're doing something creative and flexible and healthy, and then we wonder why, you know, they don't gain the skill to make their own choices. And we do a little bit the same with our employees. We have good intentions, we want them to be productive, but we micro-manage.

We do the same with our learners in a classroom. We set all the objectives, we tell them exactly how to learn, and the more I listened to adults talk about their own power and their own skill and confidence at learning, the more I began to question my teaching approach. Why was I making these choices for students and, of course, I shifted – as many people in our department did – toward being more learner-centred and letting learners make a lot of their own choices.

But what nobody has studied yet is why do we have this tendency to over-control? What is it that makes us want to control more than is actually useful for our own goals? Our goal is to get people to learn and yet to do that, we sort of force them to do all these particular steps. If we just free them up, what we find is that people learn more and they learn more enthusiastically. The energy is enormous because they're excited about what they're doing, so we're actually accomplishing more learning by being freer, but people don't that and they don't operate that way. So I would just love to see some research on what is it in all of us that makes us over- control as educators and as parents and supervisors and so on.

Paul Rogers has a book called Paul Rogers on Personal Powers which documents this phenomenon in field after field and I have a bit in my book called Intentional Changes. I have a chapter on professional over-control, which is just a fascinating phenomenon to me. It's just something about human nature that still baffles me.

The second suggestion I have is how can we people to successfully learn about social and global issues about what's happening in the world today. This is something I want people to learn. I think of it as a good thing. You see I'm a futurist as well as an adult educator and as a futurist, I really worry about where our world is headed and I think that without learning, without enormous learning in society, we're not going to change enough, we're not going to change fast enough. So as a futurist, as somebody who cares about where our society heads in the next 10 or 20 or 30 years, I see the need for learning at the societal level as well as at the individual level. That's why I really worry about and wonder about how we can get far more people to take environmental issues seriously, to take seriously some of the issues that David Livingstone raised today about equity and different groups and so on as well as having opportunities to use your skills.

I got involved with some work, with what we call Future Generations, looking ahead to the next generations, even the generations yet unborn and what kind of a world they're going to inherit, how do we get people to take all this seriously and care about future generations, to put their needs at least equal to our own needs. Dr. Gordon Ball, who was here for his thesis, studied and I'm really delighted that you're here Gord, studied the process that people went through that made them much more sensitive to the environment and the needs of future generations and so on.

But my question to Gord this morning was how do we get everybody to go through this process or at least more people so that enough care about the planet and about the future that we'll start to make some different decisions as a society. We're just incredibly short-term at this point.

I was encouraged by the study we did of in this case of Toronto City Council Members and I said earlier two mayors, and it was only ten interviews, a very small sample, but in fact all ten of those people were heavily engaged in learning, so it actually gave me a different picture of politicians that they don't just make decisions on a whim but they were actually trying to learn about the issues before they made decisions. So the kind of thing I'm talking about here is, yeah, I want people in power to learn as well. I want everybody to learn about these issues because we're all just keeping our heads in the sand, that's my sense.

Anyway, let me go on to the third point, which is the Worldwide Web. I see the Worldwide Web as the most exciting development in adult education in the last thirty years. I've been making that statement for a couple of years now and nobody's told me I'm totally crazy. The Worldwide Web is about three years old at this point, in any real sense only a couple of years old. It didn't really start taking off until 1996. You started seeing movie ads and television ads and so on. You started seeing URLs, so it's really a very young phenomenon. I think we have no sense of where the Worldwide Web is going to end up in the next three years. I think it is educators, particularly educators of adults, who need to take the web very seriously, because it's being rapidly used by more and more people as one of their key ways to get information, whether the information is good or bad.

I mean, that's one of the things that we have to deal with educators – that there's a lot of crap on the web just as there's a lot of crap in your local store if you look at the magazine rack – so you know, it's not just the web. And even libraries are known to have some things in them that aren't so accurate, so it's no guarantee to walk into a library and find quality materials. But the web is just incredibly powerful. It's there and it's instant, any time of the day or night. The web fits beautifully into the whole paradigm of informal learning; that you don't have to go and sit in some course at 7:00 o'clock on a Thursday evening, you can do it anytime you like. There's been relatively little research on the web and what it's going to do to, or is doing, to adult learning, let alone its potential. I think the potential is just absolutely enormous. If you read the history of the web – there's a book called The First Thousand Days which is about the history of the web, it's such a short history and the speed with which things did happen and are still happening makes me think that this is something we need a lot of research on.

I have two other suggestions, the first is as follows: what we find is that people are really surprised when we interview them. They're surprised that they've done so much learning and they're surprised at all the different methods they've used. You wouldn't believe how many interviews start off with us sort of explaining what we want to study. They'll say, "oh, not me, don't study me, I haven't learned anything since I left school," and they're sincere. This is not just a polite thing, they're sincere. They honestly believe they have not learned anything since they've left school. And we say, "oh well, you know, can you think of anything at you've tried to learn, any kind of knowledge or skill or understanding," and eventually they start to remember some things that they've been learning in the last year. And by the end of the interview, we had a lot of people thanking us for the interview. You know, we're in there collecting data right? We're researchers. But people thanked us and said, "you really opened my eyes, I had no idea I'd learned all these things in the last twelve months," and they had a list of five or six things that they'd learned, and they'd say "I had no idea that I used so many different methods."

So – and this is part of the iceberg phenomenon – not only are we as a society (or as educators) oblivious to informal learning, we don't even notice our own. That's right, people don't even notice their own informal learning. So what do we do about this? Well, to begin with, I think it's really empowering and helpful and supportive to encourage people to look at their own learning.

(Applause)